IN THIS ISSUE

The fine cut and text which form the center spread of our *Bulletin* this month were loaned to us by Dr. Hugh M. Raup, Director of the Harvard Forest at Petersham, Mass. This same plate forms the center spread of a 48-page booklet on *The Harvard Forest Models*, a delightful series of dioramas of the land-use history of the Forest.

Our September 21 field trip to this famous Forest will provide an opportunity to learn about one of the most intensively studied areas in the Northeast. Our field trips are organized to provide, a little at a time, that background of understanding of land-use history which is so fundamental to intelligent conservation action; but, in addition, this trip is sure to provide exciting insights into the fine detective work Dr. Raup and his colleagues at the Forest have done in deciphering the significance of things most of us may have seen but few of us have understood.

- The article on White-tailed Deer is another attempt to show how involved our conservation problems are, how our use of the land is often the deciding factor in the presence or absence of animals.
- The piece on hawk bounties is really a news item which points up the opportunity our members have to create informed public opinion. We hope many of you will consider this a responsibility too.
- Miss Mary Drugan became a Junior Member of our Society in 1952. A change of residence and new interests caused her to give up membership for a while, but when we discovered her interest in Monarch butterfly migrations through a newspaper article, we invited her to reactivate her membership and to share with us her butterfly-marking experiences. We shall look forward to more reports on this project.
- Mr. Hetzler's ornithological astronomy will interest you. A teacher at the Roger Williams Junior College, he is a frequent participant in our field trips.

OFFICIAL NOTICE

A Special Meeting of members of the Audubon Society of Rhode Island is called for 4:30 p.m. on Sunday, March 16, 1957, immediately after the close of the Screen Tour lecture, to vote on the following motion:

"Moved that Article 2, Purposes of the Society, as worded in the 1955 amendment to the By-Laws, be substituted for the original statement of purposes included in the Articles of Association of the Society dated March 10, 1906."

The original statement said that the purposes of the corporation were

"The promotion of an interest in bird life, the encouragement of the study of ornithology, and the protection of wild birds and their eggs from unnecessary destruction."

To bring the scope of the Society's interests abreast of modern conservation problems, the following statement of purposes was adopted February 25, 1955:

"The purposes of the Society are to further the conservation of wild birds and other wildlife, and to foster an intelligent interest in them; to maintain sanctuaries and render assistance in securing the establishment and maintenance of other permanent wildlife reservations, especially those protecting unique examples of original Rhode Island habitat; to cooperate with other organizations in promoting sound conservation legislation, and to aid in the enforcement of laws protecting wildlife."

The object of this action is to provide the necessary authority to properly amend the Society's articles of incorporation.



No. 1. MISCELLANEOUS SERIES

OLD GROWTH FOREST ON THE SHORE OF HARVARD POND

This remnant of old growth forest survived all the rigors of the local climate until the destructive hurricane of September 21, 1938. In the size and variety of trees and other vegetation, and in the unmistakable signs of antiquity, it contrasts strikingly with the young even-aged forests now so common on abandoned farms and cutover lands in the region. Harvard Pond, in the background, abounds in animal life of innumerable kinds, the whole scene suggesting an ideal retreat for one who would enjoy the beauty and wonder of undisturbed nature and seek refreshment of mind and body. Such a place it was to the late Professor Fisher, first director of the Harvard Forest, who appears in the model in company with the late Professor Nathaniel Shaler, to whose memory Shaler Hall is dedicated.

Among the characteristic elements of such a forest are

large, prostrate trees, blown down by heavy gales and now in various stages of decay. On the right-hand side of the model may be seen a row of hemlocks growing upon the rotted trunk of such a tree, which fell at least a hundred vears ago. Ancient windfalls are further marked by pits, caused by the tearing out of roots no longer able to give anchorage to the towering trunks. Old stubs of trees are records of those whose roots held but whose trunks were weakened through decay. Gaunt poles are all that remain of veteran pines killed by lightning. The whole forest floor is roughened by the moldering remains of forest debris, and is spongy under foot.

To the forester these remnants of original forest serve as invaluable guides to the development of present day forests, for it is becoming increasingly certain that only by closely following nature's methods can we build up healthy and vigorous stands of trees, easily and cheaply established, maintained, and regenerated.

BULLETIN of the AUDUBON SOCIETY OF RHODE ISLAND



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No. 1

RHODE ISLAND'S WHITETAILS

Rhode Island was the first State to provide a closed season for deer. It did so in 1646, within ten years of the arrival of Roger Williams in Providence. Until this year, deer have been fully protected by law for almost as long as there have been enough deer to protect. This state of affairs, however, dates no farther back than 1900, and somehow Rhode Island has fewer deer than any comparable area in the Northeast. Why?

Unfortunately, no one as yet devoted himself to doing that careful, historical documentation of the fate of Rhode Island's wildlife which every area ought to have. In the absence of a detailed chronology of wildlife changes, all we can do in sketching out the history of the White-tailed Deer in Rhode Island is to reconstruct a general outline of their history based on ecological understanding derived from investigations of deer relationships elsewhere. The white-tailed deer, as the most important large game mammal in the United States, has been rather thoroughly studied, especially during the last decade or two.

The first basic fact we must orient to is that deer are not animals of the deep, mature forest. They are animals of the forest edge because, as browsers, they must have abundant low growth to maintain them. Sprout growth in cut-over woodlands produces more food than any other type of terrain, and the deer's ups and downs can be tied to the history of our own use of the land.

Pre-colonial Rhode Island probably had more deer than much of the rest of New England because it was more open as the result of the extensive clearings made by the Indians for their agriculture. The deep penetration of Narragansett Bay with its attendant salt marshes, and the many fresh meadows which occurred along brooks and rivers also provided good deer habitat. Even then deer were apparently not truly abundant, however, because the staple food of the Indians appears to have been their own corn and squash, and the abundant shellfish of the bay. My friend Harold N. Gibbs tell me that the early records indicate that the Indians took many of their deer by trapping — in pits and snares — but lost many of these kills to the wolves which roamed the region. The presence of wolves in the earliest colonial period is itself proof of the occurrence of reasonable deer numbers, since deer were staple wolf diet in the East. Mr. Hartley F. Roberts has provided me with a copy of a 1680 Providence ordinance ordering a bounty on wolves and the payment of twenty shillings in country pay for each wolf so killed.

Colonial expansion and land clearing was rapid, and after the defeat of King Philip, in 1676, most of the Narragansett basin was opened up for farming. As the result of the agricultural development of the State, there was hardly room for deer between 1700 and 1850. It is difficult for most of us to visualize the open appearance of the countryside during the larger span of time Rhode Island has been occupied. Even the hilly, rocky uplands of the western part of the State were farmed,